

PUBLIC VERSION

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

HEADWATER RESEARCH LLC

*Plaintiff,*

v.

SAMSUNG ELECTRONICS CO., LTD and  
SAMSUNG ELECTRONICS AMERICA,  
INC.,

*Defendants.*

Case No. 2:23-CV-00103-RSP

**JURY TRIAL DEMANDED**

**DEFENDANTS' REPLY IN SUPPORT OF DEFENDANTS' MOTION FOR SUMMARY  
JUDGMENT OF INVALIDITY AND MOTION FOR PARTIAL SUMMARY  
JUDGMENT OF NON-INFRINGEMENT OF THE '733 PATENT**

PUBLIC VERSION

**TABLE OF CONTENTS**

	<b><u>Page</u></b>
I. GTALKSERVICE INVALIDATES THE ASSERTED CLAIMS.....	1
A. GTalkService and C2DM Qualify as Prior Art.....	1
B. GTalkService Renders The Asserted Claims Obvious .....	3
II. C2DM ANTICIPATES CLAIMS 1 AND 30 UNDER §102(G)(2) .....	4
III. HW’S REGISTRATION TOKEN INFRINGEMENT THEORY FAILS. ....	4

PUBLIC VERSION

**TABLE OF AUTHORITIES**

**Page(s)**

**Cases**

<i>EMED Techs. Corp. v. Repro-Med Sys. Inc.</i> , No. 2:15-cv-01167-JRG-RSP, 2019 WL 2710113 (E.D. Tex. June 28, 2019) .....	4
<i>Eolas Techs. Inc. v. Microsoft Corp.</i> , 399 F.3d 1325 (Fed. Cir. 2005).....	1

**PUBLIC VERSION****TABLE OF ABBREVIATIONS**

<b>Abbreviation</b>	<b>Term</b>
Defendants or Samsung	Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc.
Plaintiff or HW	Headwater Research LLC
DLI	Mr. de la Iglesia, Headwater's expert
'733 patent	U.S. Patent No. 8,406,733
'117 patent	U.S. Patent No. 9,198,117

\* Emphasis added unless otherwise noted.

**PUBLIC VERSION**

18894

**TABLE OF EXHIBITS**

<b>Exhibit</b>	<b>Description</b>
1	Exhibit 1 to the September 10, 2024 Deposition of Todd Hansen
2	Affidavit of Nathaniel E. Frank-White, Internet Archive, authenticating web.archive.org links at Dkt. 184-4 (SAM-HW-2_00215494)
3	Excerpts of the transcript of the September 10, 2024 Deposition of Todd Hansen

## I. GTALKSERVICE INVALIDATES THE ASSERTED CLAIMS.

### A. GTalkService and C2DM Qualify as Prior Art.

Source code, APIs, Google internal documents, and Google witness's sworn testimony shows how GTalkService employed Android's intent infrastructure and a persistent TCP connection to allow Google and non-Google apps on a mobile device to receive messages from a server *before* the priority date. Mot. at 5-8. The evidence shows a specific example of an agent identifier used to direct a message to a sample app called ApiDemos. Dkt. 184-29. The source code, internal Google documents, and webpages from archive.org cited in Samsung's motion have been authenticated by Google (Ex. 1; Dkt. 184-13 at 27:2-4) and archive.org (Ex. 2), respectively.

HW does not create a genuine fact dispute as to GTalkService or C2DM prior art status. HW's claims that GTalkService was "permanently shut down" and Mr. Hansen's testimony lack corroboration misrepresents history and the record. Mr. Hansen's testimony confirms that Google continuously used GTalkService for its own apps from its inception in 2007 through its rebranding to C2DM in 2010 and is corroborated.<sup>1</sup> Even the release note that HW cites states that "GTalkService *will provide connectivity to Google's servers for Google Talk instant messaging.*" Dkt. 184-10 at -431. Even if GTalkService had been shut down for all apps in 2008, it was operational before that date and a "public use under section 102(b) cannot be undone by subsequent actions." *Eolas Techs. Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1334 (Fed. Cir. 2005). C2DM, accused of infringement, also qualifies as prior art under § 102(g)(2) because its invalidating features, like using intents and persistent TCP connections, was conceived before the priority date.

---

<sup>1</sup> See, e.g., Dkt. 184-13 at 26:4-18; Ex. 3 at 30:5-20, 31:24-32:3, 33:7-34:22; Dkt. 184-11 at -768 (stating that [REDACTED] continued to be used at the launch of Android for Google's own apps); *id.* 184-11 at -768 (showing that C2DM was a rebranded version of GTalkService that added support for third-party apps); see also Dkt. 184-14 at -694 ("open[ing] up [of GTalkService] to third parties" with C2DM was rebooting and renaming of products).

**A. GTalkService Discloses “Agent Identifier.”**

HW’s validity case hangs on the unoriginal idea of using an “agent identifier” to identify the agent that receives a message. GTalkService was not just one app talking to another app, which HW claims without evidence. Opp. at 9. GTalkService enabled phones to receive messages intended for multiple apps and so it would have needed “agent identifiers.” As Mr. Hansen testified when comparing today’s FCM to GTalkService on the 2008 G1 phone, [REDACTED]

[REDACTED] Dkt. 184-13 at 87:7-24; *see also id.* at 26:4-18; Ex. 3 at 31:24-3; Dkt. 184-10 at -431; Dkt. 184-11 at -768; Dkt. 184-14 at 692-693. [REDACTED]

[REDACTED] Ex. 3 at 94:4-7. HW offers no other explanation for how GTalkService sent messages to the right apps.

Instead, HW refers to the agent identifier for the sample app ApiDemos, [REDACTED], as a “generic action name” but does not explain why the action name is “generic” or why a “generic action name” cannot be an “agent identifier.” Opp. at 8. The claims place no restriction on naming an “agent identifier” and only require that a message be delivered to its intended recipient based on an identifier. Google provided prior art code for a sample app ApiDemos that taught the public how to create their own apps with identifiers to use GTalkService. *See* Ex. 3 at 116:7-13 [REDACTED]

[REDACTED]

Developers could choose their own action names—generic, specific, even arbitrary—to identify their apps. An incoming GTalkService data message was routed to the ApiDemos app based on the action name [REDACTED]. The claims require nothing more.

HW also argues that an action name identifies an action and not a device agent. Opp. at 8.

But an action name identifies an action *and* an application that performs the action. For example, upon receiving a message with the action name [REDACTED], the phone knows that the message should be delivered to the device agent in the sample app ApiDemos. The source code makes it plain that ApiDemos is associated with that action. *See* Dkt. 184-29 [REDACTED]). Dr. Foster did not concede otherwise by explaining that an “app identifier” can be used as an alternative to determine the recipient app if an action name was found not to be an “app identifier.” *See* Mot. at 11, Dkt. 184-12 ¶ 221. This is not a new argument, as HW alleges. *See* Dkt. 184-12 ¶ 219 (opining that [REDACTED] is an “agent identifier”).

HW summarily states that “[t]he fact that only one application might be capable of handling a particular action on a device does not transform an action identifier into an application identifier.” Opp. at 9. But an “action name” can identify both the app (e.g., the ApiDemos apps) and an associated action (e.g., receive a message) and remain an “agent identifier.” HW failed to seek a narrowing construction that would preclude such an identifier from being an “action name.”

Finally, HW argues that Samsung did not identify a message containing an “identifier that indicates a particular application (or device agent) *among a plurality of applications/agents*.” Opp. at 8. The claims of the ’733 patent do not even recite “a plurality of applications,” and DLI did not raise this argument for the ’733 patent. The only citation (Dkt. 211-3 [DLI Op. Rpt.] ¶ 128) HW provides refers to the “plurality of applications” limitation of *the ’117 patent*. And as explained above, the uncontroverted evidence shows that GTalkService was used by a plurality of Google’s first-party apps like Gmail and Contacts, so [REDACTED] would have identified the ApiDemos app among Google’s first party apps like Gmail and Contacts.

**B. GTalkService Renders The Asserted Claims Obvious**



DLI opines that a POSITA would not have been motivated to “limit or restrict” GTalkService or “reduc[e] the number of persistent connections” but that is irrelevant to using an identifier other than an action name. Dkt. 211-3 ¶¶ 402-406. HW does not explain how his secondary considerations undercuts a motivation to use other identifiers. DLI suggests that using an action name was not secure. Dkt. 211-3 ¶ 749. If that were true, it would motivate a POSITA to use an alternative identifier, which supports obviousness. For the dependent claims, HW merely cites to entire sections of DLI’s opinions but “[t]he party opposing summary judgment is required to identify *specific evidence* in the record and to articulate the *precise manner* in which that evidence supports his or her claim. [...] Rule 56 does not impose upon the district court a duty to sift through the record in search of evidence to support a party’s opposition to summary judgment.” *EMED Techs. Corp. v. Repro-Med Sys. Inc.*, 2019 WL 2710113, at \*1 (E.D. Tex. June 28, 2019).

## **II. C2DM ANTICIPATES CLAIMS 1 AND 30 UNDER §102(G)(2)**

Because every claim element was conceived before the alleged invention (as shown in GTalkService) and reduced to practice as C2DM, C2DM qualifies as prior art under §102(g)(2). And because HW accuses C2DM of infringing claims 1 and 30, under HW’s own theory, C2DM anticipates claims 1 and 30. HW claims that C2DM is not a rebranded version of GTalkService, but no matter the label, the accused (and invalidating) features of C2DM were conceived in GTalkService. Dkt. 184-13 at 27:10-28:11, 87:7-24; Ex. 3 at 31:24-3, 33:7-34:22, 93:16-94:7, 106:21-107:18, 184:8-20. Although C2DM also supported non-Google apps, conception does not require support such apps. HW fails to distinguish C2DM from GTalkService in a pertinent way. Opp. at V.

## **III. HW’S REGISTRATION TOKEN INFRINGEMENT THEORY FAILS.**

The claims require the “agent identifier” to be in the message received by the device. No reasonable jury can find that a registration token is included in the received message so HW’s

registration token-based infringement theory cannot succeed. HW does not dispute that the only “token” identified by DLI in the received message is [REDACTED] containing the registration token” nor that [REDACTED] to a collapse key, not an “agent identifier.” Opp. at 11. Instead, HW mischaracterizes its own expert’s opinions in paragraphs 843 and 417 as support for DLI’s registration token theory. Opp. at 12. But paragraph 843 merely states that the received message includes a “package name” and “device user id,” and which DLI distinguishes from a registration token. See Dkt. 211-4 ¶ 170 ([REDACTED] [REDACTED]). HW cannot defeat summary judgment by simply recasting the package name and device user id as registration tokens.

Dated: November 12, 2024

Respectfully submitted,

By: /s/ Kevin Jang  
Ruffin B. Cordell  
TX Bar No. 04820550  
Michael J. McKeon  
DC Bar No. 459780  
mckeon@fr.com  
Jared Hartzman (*pro hac vice* forthcoming)  
DC Bar No. 1034255  
hartzman@fr.com  
**FISH & RICHARDSON P.C.**  
1000 Maine Avenue, SW, Ste 1000  
Washington, D.C. 20024  
Telephone: (202) 783-5070  
Facsimile: (202) 783-2331

Thad C. Kodish  
GA Bar No. 427603  
tkodish@fr.com  
Benjamin K. Thompson  
GA Bar No. 633211

**PUBLIC VERSION**  
#1800  


bthompson@fr.com  
Jonathan B. Bright  
GA Bar No. 256953  
jbright@fr.com  
Christopher O. Green  
GA Bar No. 037617  
cgreen@fr.com  
Noah C. Graubart  
GA Bar No. 141862  
graubart@fr.com  
Sara C. Fish  
GA Bar No. 873853  
sfish@fr.com  
Nicholas A. Gallo  
GA Bar No. 546590  
gallo@fr.com  
Steffen C. Lake (*pro hac vice* forthcoming)  
GA Bar No. 512272  
lake@fr.com  
Vivian C. Keller (*pro hac vice*)  
GA Bar No. 651500  
keller@fr.com  
**FISH & RICHARDSON P.C.**  
1180 Peachtree St. NE, Fl. 21  
Atlanta, GA 30309  
Telephone: (404) 892-5005  
Facsimile: (404) 892-5002

Leonard E. Davis  
TX Bar No. 05521600  
ldavis@fr.com  
Andria Rae Crisler  
TX Bar No. 24093792  
crisler@fr.com  
Thomas H. Reger II  
Texas Bar No. 24032992  
reger@fr.com  
**FISH & RICHARDSON P.C.**  
1717 Main Street, Suite 5000  
Dallas, TX 75201  
Telephone: (214) 747-5070  
Facsimile: (214) 747-2091

John-Paul R. Fryckman (*pro hac vice*)  
CA Bar No. 317591  
John W. Thornburgh

**PUBLIC DIVISION**  
#18001  
[REDACTED]

CA Bar No. 154627  
thornburgh@fr.com  
**FISH & RICHARDSON P.C.**  
12860 El Camino Real, Ste. 400  
San Diego, CA 92130  
Telephone: (858) 678-5070  
Facsimile: (858) 678-5099

Katherine D. Prescott (*pro hac vice*)  
CA Bar No. 215496  
prescott@fr.com  
**FISH & RICHARDSON P.C.**  
500 Arguello Street  
Suite 400  
Redwood City, CA 94063  
Telephone: (650) 839-5180  
Facsimile: (650) 839-5071

Kyle J. Fleming (*pro hac vice*)  
NY Bar No. 5855499  
kfleming@fr.com  
**FISH & RICHARDSON P.C.**  
7 Times Square, 20th Floor,  
New York, NY 10036  
Telephone: (212) 765-5070  
Facsimile: (212) 258-2291

Melissa R. Smith  
State Bar No. 24001351  
Melissa@gillamsmithlaw.com  
**GILLAM & SMITH, LLP**  
303 South Washington Avenue  
Marshall, Texas 75670  
Telephone: (903) 934-8450  
Facsimile: (903) 934-9257

Andrew Thompson ("Tom") Gorham  
State Bar No. 24012715  
tom@gillamsmithlaw.com  
**GILLAM & SMITH, LLP**  
102 N. College, Suite 800  
Tyler, Texas 75702  
Telephone: (903) 934-8450  
Facsimile: (903) 934-9257

Michael E. Jones

**PUBLIC VERSION**  
#1802  
[REDACTED]

State Bar No. 10929400  
mikejones@potterminton.com  
Shaun W. Hassett  
State Bar No. 24074372  
shaunhassett@potterminton.com  
**POTTER MINTON, P.C.**  
102 N. College Ave., Suite 900  
Tyler, Texas 75702  
Telephone: (903) 597-8311  
Facsimile: (903) 593-0846

Lance Lin Yang  
CA. Bar No. 260705  
Lanceyang@quinnemanuel.com  
Kevin (Gyushik) Jang  
CA Bar No. 337747  
kevinjang@quinnemanuel.com  
Sean S. Pak  
CA Bar No. 219032  
seanpak@quinnemanuel.com  
**QUINN EMANUEL URQUHART &  
SULLIVAN, LLP**  
50 California Street, 22nd Floor  
San Francisco, CA 94111  
Telephone: (415) 875-6600

Brady Huynh (admitted *pro hac vice*)  
CA Bar No. 339441  
bradyhuynh@quinnemanuel.com  
**QUINN EMANUEL URQUHART &  
SULLIVAN, LLP**  
555 Twin Dolphin Drive, 5<sup>th</sup> Floor  
Redwood Shores, CA 94065  
Telephone: (650) 801-5000  
Facsimile: (650) 801-5100

Jon Bentley Hyland  
Texas Bar No. 24046131  
jhyland@hilgersgraben.com  
Grant K. Schmidt  
Texas Bar No. 24084579  
gschmidt@hilgersgraben.com  
**HILGERS GRABEN PLLC**  
7859 Walnut Hill Lane, Suite 335  
Dallas, Texas 75230  
Telephone: (972) 645-3097

**PUBLIC VERSION**

[REDACTED]

**ATTORNEYS FOR DEFENDANTS  
SAMSUNG ELECTRONICS CO., LTD. AND  
SAMSUNG ELECTRONICS AMERICA, INC.**

**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that a true and correct copy of the foregoing was served on counsel of record for Plaintiff via electronic mail on November 12, 2024.

/s/ Kevin Jang  
Kevin Jang

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]  
[REDACTED]